topotactic transition

A transition in which the crystal lattice of the product phase shows one or more crystallographically equivalent, orientational relationships to the crystal lattice of the parent phase. Example: Transitions in which the anionic array is unchanged during the transition but cation reorganization occurs, as in:

$$\beta\text{-Li}_2\mathsf{ZnSiO}_4 \quad \longrightarrow \quad \text{γ-Li}_2\mathsf{ZnSiO}_4$$

Source:

PAC, 1994, 66, 577 (Definitions of terms relating to phase transitions of the solid state (IUPAC Recommendations 1994)) on page 593